



# UNITED STATES PATENT AND TRADEMARK OFFICE

5/1

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,224	07/09/2001	Daniel T. Rumack	1939.BDM	6293
7590	02/27/2004			
Cynthia L. Foulke National Starch and Chemical Company 10 FINDERNE AVENUE BRIDGEWATER, NJ 08807			EXAMINER YAO, SAMCHUAN CUA	
			ART UNIT 1733	PAPER NUMBER

DATE MAILED: 02/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/901,224	<b>Applicant(s)</b> RUMACK, DANIEL T.	
	<b>Examiner</b> Sam Chuan C. Yao	<b>Art Unit</b> 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 9-26-03/1-22-04.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.  
     4a) Of the above claim(s) 8-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-6 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

One of the tests, the court effectively uses, for determining whether or not something is new matter is a sufficiency of support in the original disclosure.

The question that must be answered is *"whether the disclosure of the application relied upon reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter"*, In re Ralston 227 USPQ 177. Here, it appears that Applicant did not have possession at that time of the later claimed subject matter of precluding *"styrene/allyl polyol"*. The original disclosure as a whole fails to reasonably convey to one in the art that, a styrene/allyl crystalline polyol is precluded in the formulating the presently recited one-part polyurethane hot-melt adhesive composition. The only support in the original disclosure is that, if desired, the hot-melt polyurethane adhesive composition may be made without using a crystalline polyester polyol (abstract; paragraph 0013).

Applicant is directed to a statement in MPEP 2173.05(i), where it states: "*Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See In re Johnson, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) ('[the] specification, having described the whole, necessarily described the part remaining.'). See also Ex parte Grasselli, 231 USPQ 393 (Bd. App. 1983), aff'd mem., 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement. Note that a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a prima facie case for lack of descriptive support. Ex parte Parks, 30 USPQ2d 1234,1236 (Bd. Pat. App. & Inter. 1993). See MPEP § 2163 - § 2163.07(b) for a discussion of the written description requirement of 35 U.S.C. 112, first paragraph.*" (emphasis added).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1,153,997 A1 in view of Admitted Prior Art (APA) and Wolinski (US 3,994,764).

Note: if Applicant is able to rebut the 112 1<sup>st</sup> paragraph rejection (i.e New Matter rejection) set forth in numbered paragraph 2 above, this rejection will be withdrawn.

With respect to claims 1-2, 5, 7 and 22, EP '997 discloses a moisture curing polyurethane (PU) hot-melt adhesive comprising: a) amorphous polyol such as an amorphous polyester and/or an amorphous polyether; b) .1-10% by weight of a polyol of a styrene/ally alcohol addition copolymer, the copolymer having a crystalline property at ambient temperature; c) an excess of polyisocyanate; and d) a thermoplastic acrylic resin (taken to be non-reactive). See abstract; page 3 lines 8-44 and claims 1-3. In example 1, for instance, it further teaches using 151.8 g of PPG (i.e. an amorphous polyether polyol), 54 g of castor oil 12 g styrene/ally alcohol, and 246 g DEG-PA polyester (i.e. an amorphous polyester polyol). Hence the weight percent of amorphous PPG is about 25.3 % (i.e this falls within the weight range of a substantially non-crystalline polyol recited in claim 1).

EP ' 997 does not expressly teach adding from about 1-30% of a reactive acrylic polymer. However, it would have been obvious in the art to add a reactive hydroxyl-containing acrylic to a PU hot-melt adhesive composition of EP '997, because the APA discloses that it is a common practice in the art to add a reactive hydroxyl-containing acrylic and non-reactive acrylic to a reactive PU hot-

melt adhesive to improve the adhesive performance (specification; page 2 full paragraph 1). Moreover, absent any showing of unexpected benefit, it would have been obvious in the art to add around recited amount of reactive hydroxyl-containing acrylic as such is taken to be well known in the art of making a reactive PU adhesive as exemplified in the teachings of Wolinski (abstract; col. 56 to col. 7 line 11; col. 8 lines 11-20). Moreover, one in the art would have determined, by routine experimentation, a workable/optimal amount of reactive acrylic to be added to an adhesive composition taught by EP '997.

With respect to claims 3 and 6, in example 1, for instance, EP '997 also teaches using about 41 weight percent of DEG-PA polyester. About 40% recited in this claim is taken to read on about 41 percent by weight. Moreover, since one in the art would have determined a suitable amount of amorphous polyester and/or non-reactive acrylic to optimize the adhesive composition of EP '997, these claims would have been obvious in the art.

With respect to claim 4, since it is known in the art that a green strength of a polyurethane hot-melt adhesive can be enhanced by incorporating crystalline polyester diols as disclosed by the APA, this claim would have been obvious in the art.

### ***Conclusion***

5. It is suggested for Counsel to amend claim 3 to insert **“(but not 0 wt%)”** for all components having a limitation *“up to about ...”* and remove the negative limitation to define over the EP '997 reference..

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (571) 272-1224. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sam Chuan C. Yao  
Primary Examiner  
Art Unit 1733

Scy  
02-23-04